errors in bridging nearly always connote errors in carrying. Example 23 in division contains a zero difficulty but since it was tried by so few the errors could not be tabulated. Therefore the errors tabulated in each case are the minimum number.

Types of errors made by pupils completing grade 4 and entering grade 5 are:

In subtraction, errors are due to ignorance of the more difficult subtraction combinations, reversing process when subtrahend digit is larger than corresponding digit in minuend, those due to zero difficulties, borrowing, unfamiliar equation forms, confused process and careless errors (copying, etc.)

In multiplication, types of errors made are those due to ignorance of more difficult multiplicative facts, carrying zero difficulties, unfamiliar equation form, confusion of process (harmful transfer) incorrect placing of partial products, and careless errors (such as placing decimal where they do not belong, copying, etc.)

In addition, types of errors, are those due to ignorance of the more difficult addition combinations, inability to handle higher decade addition, zero difficulties, carrying, unfamiliar equation form, confused process, and careless errors.

For pupils entering grade 6 from grade 5 it was found that in general pupils may be expected to work 48 examples distributed as follows: 1-20 in subtraction, 1-18 in multiplication, 1-23 in addition, and 1-27 in division. Pupils in grade 5 have failed to fix examples of the type 1, 7, 19, 20 in subtraction, 8-18, 24, 26 in multiplication, 20-23 in addition and 17, 19, 23, 27 in division.

Several interesting facts were observed. Remainders were often put over the dividend instead of the divisor. Errors in estimating quotients usually connote errors in bringing down terms of dividend. Subtraction in long division is often wrong because figures are not put in the right places to be subtracted.

Types of errors in subtraction made by pupils entering grade 6 are those due to ignorance of more difficult subtraction combinations, incorrect borrowing, zero difficulties, confused processes, careless errors, failure to reduce to lowest terms, putting denominator under integer, unfamiliar equation form, drawing down fractions, not multiplying by numerator or dividing by denominator, and subtracting the denominator from the multiplicand.

Types of errors in multiplication are: more difficult combinations, carrying, zero, partial products, confused errors in computation, failure to reduce to lowest terms, error in reducing to whole or mixed number, putting denominator under integer, equation, drawing down fractions, not trying, not multiplying by numerator or dividing by denominator, and subtracting denominator from multiplicand.

Types of errors in addition are those due to ignorance of more difficult addition combinations, incorrect carrying, zero difficulty, inability to handle higher decade addition, confused process, careless errors, failure to reduce to lowest terms, unfamiliar equation form, failure to place decimal, and multiplying denominator.